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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,965	03/02/2004	Jathan D. Edwards	53868US05	2139

7590 07/28/2008
Attention: Eric D. Levinson
Imation Corp.
Legal Affairs
P.O. Box 64898
St. Paul, MN 55164-0898

EXAMINER

BODAWALA, DIMPLE N

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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07/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/790,965	Applicant(s) EDWARDS ET AL.	
	Examiner DIMPLE N. BODAWALA	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-35 and 42-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-35 and 42-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

In view of the amendment filed on 5/1/2008, following rejections are withdrawn as a reason of record from the previous office action, mailed on 2/15/2008.

- Rejection of claims 30-32, 35, 42, 45 and 46 under 35 USC 103 (a) as being unpatentable over Kerfeld (US 6,190,838) in view of Sandstrom (US 6,382,955).
- Rejection of claims 33, 34, 43 and 44 under 35 USC 103 (a) as being unpatentable over Kerfeld (US 6,190,838) in view of Sandstrom (US 6,382,955) further in view of Sasaki et al. (US 5,325,353).

In view of the amendment filed on 5/1/2008, following rejections are maintained as a reason of record from the previous office action, mailed on 2/15/2008.

- Rejection of claims 42-46 under 35 USC 102(b) as anticipated by or, in the alternative, under 35 USC 103(a) as obvious over Suzuki et al. (US 4,947,384).

- Rejection of claims 30-35 under 35 USC 103(a) as being unpatentable over Suzuki et al. (US 4,947,384) in view of Sasaki et al. (US 5,325,353).

Response to Arguments

1. Applicant further argues that the art, Sandstrom (US 6,382,955) has a filing date of 9/27/199. Therefore Sandstrom (US 6,382,955) is not prior art to the current application insofar as the current application has a priority date that is earlier than the filing date of Sandstrom. Applicant's argument is fully considered but not found persuasive because all of the claimed subject matter of Sandstrom (US 6,382,955) is fully supported by Parent case (08/839,933, filed on 4/17/1997). Therefore, effective filing date for Sandstrom (US 6,382,955) is 4/17/1997, and, thus, as a conclusion, Sandstrom (US 6,382,955) is still considered as a prior art to the current application.
2. Applicant further argues that Suzuki et al. (US 4,947,384) having a typographical error which failed to demonstrate that Suzuki et al. (US 4,947,384) actually enables a track pitch of 1.6 micro inch and groove dimension of 0.8 micro inch. As an evidence for the typographical error in Suzuki et al. (US 4,947,384), Applicant argues that the description of Suzuki describes "the spot diameter of the laser beam for read-out is ordinarily within the width of the land portion and also describes tracing singular land

portions using the laser spot and laser beam actuated to trace out singular land portion. One of ordinary skill in the art would recognize that all of these descriptions are unattainable for track pitches that are much smaller than the focal spot size of the laser beam. Suzuki et al. (US 4,947,384) does not enable any 40 nm laser spot size that would be required to attain track pitch dimensions of 1.6 microinch and groove dimension of 0.8 microinch. The mis-translated dimensions of 1.6 micorinch and groove dimension of 0.8 micoinch are not enabled. As further evidence that the teaching of Suzuki et al. (US 4,947,384) is descriptive of conventional track pitches at 1.6 microinch and conventional groove dimensions of 0.8 microinch. Applicant argues that Suzuki et al. (US 4,947,384) describes the optical push-pull tab tracking method, which relies on the optical diffraction of the incident focused laser light into +/-1st order diffraction beam, which interfere with the zero order reflected beam to create a trackable signal from a spit tracking detector. If Suzuki et al. (US 4,947,384) actually contemplated a 40 nm track pitch, then no optical diffraction would occur since the diffraction grating would be significantly less than the incident wavelength, but instead presumes conventional tracking leans which is consistent with the 1.6micrometer pitch of priority document (JP 62-90081) of Suzuki et al. (US 4,947,384).

Applicant's arguments are fully considered, but not found persuasive because

Applicant fails to provide any references or declarations which prove that the achievement of the track pitch dimension of 1.6 micro inches and the groove dimension of 0.8 micro inches was not attainable in 1987. Applicant further fails to provide any references or declarations to show that the error occurred in the US Suzuki reference, instead of JP references. Furthermore, Applicant's arguments are not sufficient to overcome the disclosure of the prior art, Suzuki. Therefore, Applicant is advised to submit evidence, and not only arguments which indicates that it can not be obvious to have dimension of track pitch and groove as defined in the claim of the instant application.

3. Applicant's arguments, see Remarks, filed on 5/1/2008, with respect to the rejection(s) of claim(s) 35 and 42 under 103(a) have been fully considered and are persuasive.

4. Applicant argues that the current application has a priority date of 4/6/1998. All of the claimed subject matter of the pending claims is fully supported by priority documents 09/055,825, which bears the filing date of 4/6/1998, now ABN. Therefore, Kerfeld (US 6,190,838), having filing date of 4/6/1998, is not the prior art to the current Application. Applicant argument is fully considered and found persuasive. Therefore, the rejection of claims in view of Kerfeld (US 6,190,838) has been withdrawn.

5. However, upon further consideration, a new ground(s) of rejection is made which is described as follows:

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. **Claims 42-46 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Suzuki et al. (U S Patent No. 4,947,384).**

8. Suzuki et al ('384) discloses the master stamper (See col.4 line 41) which comprises the data layer (5) on the lower side surface of the stamper; and a stamper pattern formed in the data layer (5) defined by adjacent stamper lands (3) and the stamper grooves (2) (See col.1 lines 11-16), wherein the stamper grooves (2) extend down into the stamper surface, wherein the groove (2) defines the groove bottom and the stamper land defines the stamper land top. It further teaches that the track pitch is less than 700 nanometer as well as 425 nanometer by providing 1.6 micro inches, which converts to 40.64 nanometer (See col.1 lines 49-67). Figure 2 teaches that the groove bottoms are flat and coplanar, while figure 3 teaches that the groove bottoms include sharp corners. It further teaches that the width of the groove bottom is 0.8 micro inches, which converts to 20.32 nanometer, which value is

greater than 35 percent of the track pitch (See col.1 lines 49-67). It further teaches that the depth of the groove is one eighth of the reading laser beam wavelength, thus inherently discloses a groove depth within the claimed range based on the desired depth related to the laser beam wavelength (See col.1 lines 49-67).

9. Claims 42 and 46 of the instant application contain the method step for the production of the second-generation stamper, which is created from a first generation stamper, and also the laser spot size associated with a laser used to perform laser etching of the master pattern of the master disk. With regard to the claim recitations regarding the method of forming the apparatus, such relate to the method of producing the claimed apparatus, which does not impart patentability to the apparatus claims. The determination of patentability is based on the product apparatus itself, *In re Brown*, 173 USPQ 685, 688, and the patentability of a product does not depend on its method of production, *In re Pilkington*, 162 USPQ 145, 174; see also *In re Thorpe*, 227 USPQ 964 (AFC 1985). Therefore, claims 42 and 46 are being unpatentable over the prior art, *Suzuki* ('384).

10. Claims 30-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (U S Patent No. 4,947,384) in view of Sasaki et al. (U S Patent No. 5,325,353).

11. Suzuki et al ('384) discloses the master stamper (See col.4 line 41) which comprises the data layer (5) on the lower side surface of the stamper; and a stamper pattern formed in the data layer (5) defined by adjacent stamper lands (3) and the stamper grooves (2) (See col.1 lines 11-16), wherein the stamper grooves (2) extend down into the stamper surface, wherein the groove (2) defines the groove bottom and the stamper land defines the stamper land top. It further teaches that the track pitch is less than 425 nanometer by providing 1.6 micro inches, which converts to 40.64 nanometer (See col.1 lines 49-67). Figure 2 teaches that the groove bottoms are flat and coplanar, while figure 3 teaches that the groove bottoms include sharp corners. It further teaches that the width of the groove bottom is 0.8 micro inches, which converts to 20.32 nanometer, which value is greater than 35 percent of the track pitch (See col.1 lines 49-67). It further teaches that the depth of the groove is one eighth of the reading laser beam wavelength, which means if the Ar laser wavelength is 500 nm, so depth of the groove which is $1/8$ of laser wavelength will give value higher than 50nm, thus it can be understandable to have a groove depth within the claimed range based on the desired depth related to the laser beam wavelength (See col.1 lines 49-67).
12. Claim 35 of the instant application contains the method step for the production of the claimed the second-generation stamper, which is created

from a first generation stamper. With regard to the claim recitations regarding the method of forming the apparatus, such relate to the method of producing the claimed apparatus, which does not impart patentability to the apparatus claims. The determination of patentability is based on the product apparatus itself, *In re Brown*, 173 USPQ 685, 688, and the patentability of a product does not depend on its method of production, *In re Pilkington*, 162 USPQ 145, 174; see also *In re Thorpe*, 227 USPQ 964 (AFC 1985).

13. Thus, Suzuki et al. ('384) discloses all claimed structural limitations as discussed above, but fails to teach or suggest that the groove bottoms are wider than land tops.

14. Sasaki et al. ('353) discloses an optical recording medium which comprises a substrate having groove surface and land surface, wherein width of groove surface is 1.0 micrometer, while the width of the land top portion is 0.6 micrometer, which proves that the groove bottoms are wider than the land tops (See col.1 lines 41-49), wherein the width of the groove bottom is 1 micrometer, which is converted to 1000 nanometer, is greater than 250 nanometer. It discloses width of the groove is 1000 nanometer which is greater than 25% of the track pitch as well as greater than the 35% of the track pitch.

15. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Suzuki et al. ('384) by providing groove bottoms are wider than land tops for increasing the quantity of reflected light of a laser beam thrown on the groove surface during the recording process to improve the measure of evaluation of noise in the product (See col.1 lines 60-65 and col.2 lines 6-9) and to enable three spot tracking performance (See col.2 lines 10-21) as suggested by Sasaki et al. ('353).

New Grounds of Rejection

Claim Rejections - 35 USC § 103

16. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

17. Claims 30-35 and 42-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al. (US 5,325,353) in view of Sandstrom (US 6,002,663).

18. As to claim 30, Sasaki et al. ('353) discloses an invention which comprises a substrate (1) as a stamper having a recording layer (3), wherein recording layer is also known as a data layer with pattern, wherein data layer comprises lands (8) and groove (9), wherein groove defines groove bottom and land defines land tops (See figure 1A). Figure 1A further shows

that the groove bottoms (9) are wider than land tops (8). It further teaches that the track pitch is set to 1.6 micrometer (See col.2 lines 66-67).

19. As to claim 31, it further teaches that the groove bottoms (9) are generally flat and coplanar (See figure 1A).

20. As to claim 33-34, it further teaches that the width of the groove bottom (9) is 1 micrometer which is converted to the 1000 nm, which inherently suggests that the width of the groove bottom is greater 100 nm as well as greater than 250 nm.

21. As to claims 42, 43, 44, 47, 50, 51, it discloses an invention which comprises a substrate (1) as a stamper having a recording layer (3), wherein recording layer is also known as a data layer with pattern, wherein data layer comprises lands (8) and groove (9), wherein groove defines groove bottom and land defines land tops (See figure 1A). Figure 1A further shows that the groove bottoms (9) are wider than land tops (8). It further teaches that the track pitch is set to 1.6 micrometer (See col.2 lines 66-67). It further teaches that the laser spot size is approximately 1 micrometer (See abstract), which inherently suggests that the track pitch (1.6 micrometer) is less than 2 multiply by a laser spot size (1 micrometer => $1*2 = 2$ micrometer > track pitch). It further teaches that the width of the groove bottom (9) is 1 micrometer which is converted to the 1000 nm, which inherently suggests

that the width of the groove bottom is greater 100 nm as well as greater than 250 nm. It discloses width of the groove is 1000 nanometer which is greater than 25% of the track pitch as well as greater than the 35% of the track pitch. It further inherently suggests that the width of the groove is greater than 50% of the track pitch. Here, prior art discloses spot size for defining the master pattern of master disc, but the dimension of laser spot size is inherently present in the art, and, thus, the current application is unpatentable over the prior art. *Furthermore*, the claiming of new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable, *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977).

22. As to claims 45, 48, it further teaches that the groove bottoms (9) are generally flat and coplanar having sharp corners (See figure 1A).

23. Sasaki et al. ('353) discloses all claimed structural limitations as discussed above. It further teaches that the track pitch is set to 1.6 micrometer (See col.2 lines 66-67), but fails to teach or suggest that the track pitch is less than 425 nanometer. It further fails to teach or suggest depth of groove.

24. As to claim 30, 32, 42, 47 and 49, Sandstrom ('663) discloses an apparatus which comprises disc substrate (24) having a formatted surface

(34) with a groove (38), wherein the groove having depth 0.3 mm which is higher than 50 nanometer (See col.7 lines 15-24). It further teaches that the formatted surface having a track pitch which is less than 0.37 micrometer (See col.4 lines 1-5), which can be understandable that the formatted surface having track pitch which is less than 425 nanometer as well as less than 700 nanometer.

25. Claims 35 and 52 of the instant application contains the method step for the production of the claimed the second-generation stamper, which is created from a first generation stamper. With regard to the claim recitations regarding the method of forming the apparatus, such relate to the method of producing the claimed apparatus, which does not impart patentability to the apparatus claims. The determination of patentability is based on the product apparatus itself, *In re Brown*, 173 USPQ 685, 688, and the patentability of a product does not depend on its method of production, *In re Pilkington*, 162 USPQ 145, 174; see also *In re Thorpe*, 227 USPQ 964 (AFC 1985).

26. Claims 42 and 46 of the instant application contain the method step for the production of the second-generation stamper, which is created from a first generation stamper, and also the laser spot size associated with a laser used to perform laser etching of the master pattern of the master disk. With regard to the claim recitations regarding the method of forming the

apparatus, such relate to the method of producing the claimed apparatus, which does not impart patentability to the apparatus claims. The determination of patentability is based on the product apparatus itself, *In re Brown*, 173 USPQ 685, 688, and the patentability of a product does not depend on its method of production, *In re Pilkington*, 162 USPQ 145, 174; see also *In re Thorpe*, 227 USPQ 964 (AFC 1985).

27. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Sasaki et al. ('353) by providing track pitch which is less than 425 nanometer because such an alignment is involved to increase the degree of the modulation for enlarging the tracking signal as suggested by Sandstrom ('663).

28. Claims 30-35 and 47-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandstrom (US 6,002,663) in view of Sasaki et al. (US 5,325,353).

29. Sandstrom ('663) discloses an invention which comprises stamper (62) includes tracks formed of data and pits corresponding to the data to be embossed into the information area (26) of the disc substrate (24) (See col.8 lines 30-34), which inherently suggests that the stamper having surface which defines data layer with adjacent of stamper grooves (38) and lands, wherein groove (38) defines groove bottom and land defines as land tops. It

further teaches that groove having depth 0.3 mm which is higher than 50 nanometer (See col.7 lines 15-24). It further teaches that the formatted surface having a track pitch which is less than 0.37 micrometer (See col.4 lines 1-5), which can be understandable that the formatted surface having track pitch which is less than 425 nanometer as well as less than 700 nanometer.

30. Sandstrom ('663) discloses all claimed structural limitations as discussed above, but fails to teach or suggests that the groove bottoms are wider than land tops.

31. Sasaki et al. ('353) discloses an invention which comprises a substrate (1) as a stamper having a recording layer (3), wherein recording layer is also known as a data layer with pattern, wherein data layer comprises lands (8) and groove (9), wherein groove defines groove bottom and land defines land tops (See figure 1A). Figure 1A further shows that the groove bottoms (9) are wider than land tops (8). It further teaches that the groove bottoms (9) are generally flat and coplanar with sharp corners (See figure 1A). It further teaches that the width of the groove bottom (9) is 1 micrometer which is converted to the 1000 nm, which inherently suggests that the width of the groove bottom is greater 100 nm as well as greater than 250 nm. It discloses width of the groove is 1000 nanometer which is greater than 25% of the track

pitch as well as greater than the 35% of the track pitch. It further inherently suggests that the width of the groove is greater than 50% of the track pitch.

32. Claims 35 and 52 of the instant application contains the method step for the production of the claimed the second-generation stamper, which is created from a first generation stamper. With regard to the claim recitations regarding the method of forming the apparatus, such relate to the method of producing the claimed apparatus, which does not impart patentability to the apparatus claims. The determination of patentability is based on the product apparatus itself, *In re Brown*, 173 USPQ 685, 688, and the patentability of a product does not depend on its method of production, *In re Pilkington*, 162 USPQ 145, 174; see also *In re Thorpe*, 227 USPQ 964 (AFC 1985).

33. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Sandstrom ('663) by providing groove bottoms are wider than land tops for increasing the quantity of reflected light of a laser beam thrown on the groove surface during the recording process to improve the measure of evaluation of noise in the product (See col.1 lines 60-65 and col.2 lines 6-9) and to enable three spot tracking performance (See col.2 lines 10-21) as suggested by Sasaki et al. ('353).

34. **Claims 42 and 46 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sandstrom (US 6,002,663).**

35. Sandstrom ('663) discloses an invention which comprises stamper (62) includes tracks formed of data and pits corresponding to the data to be embossed into the information area (26) of the disc substrate (24) (See col.8 lines 30-34), which inherently suggests that the stamper having surface which defines data layer with adjacent of stamper grooves (38) and lands, wherein groove (38) defines groove bottom and land defines as land tops (See figure 2). Figure 2 further teaches that the groove (38) extend down into the data layer or surface of stamper or disc. It further teaches that groove having depth 0.3 mm which is higher than 50 nanometer (See col.7 lines 15-24). It further teaches that the formatted surface having a track pitch which is less than 0.37 micrometer (See col.4 lines 1-5), which can be understandable that the formatted surface having track pitch which is less than 425 nanometer as well as less than 700 nanometer.

36. Claims 42 and 46 of the instant application contain the method step for the production of the second-generation stamper, which is created from a first generation stamper, and also the laser spot size associated with a laser used to perform laser etching of the master pattern of the master disk. With

regard to the claim recitations regarding the method of forming the apparatus, such relate to the method of producing the claimed apparatus, which does not impart patentability to the apparatus claims. The determination of patentability is based on the product apparatus itself, *In re Brown*, 173 USPQ 685, 688, and the patentability of a product does not depend on its method of production, *In re Pilkington*, 162 USPQ 145, 174; see also *In re Thorpe*, 227 USPQ 964 (AFC 1985). Here, prior art discloses the master pattern of master disc, but the dimension of laser spot size which is associated with the pattern is not described, but the prior art is capable to have such feature for defining the track pitch of the master disc, and, thus, the current application is unpatentable over the prior art. *Furthermore*, the claiming of new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable, *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). Therefore, claims 42 and 46 are being unpatentable over the prior art, Sandstrom ('663).

37. Claims 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandstrom (US 6,002,663) in view of Sasaki et al. (US 5,325,353).

38. Sandstrom ('663) discloses all claimed structural limitations as discussed above, but fails to teach or suggests that the width of groove bottoms is greater than 25% of the track pitch.

39. Sasaki et al. ('353) discloses an invention which comprises a substrate (1) as a stamper having a recording layer (3), wherein recording layer is also known as a data layer with pattern, wherein data layer comprises lands (8) and groove (9), wherein groove defines groove bottom and land defines land tops (See figure 1A). Figure 1A further shows that the groove bottoms (9) are wider than land tops (8). It further teaches that the groove bottoms (9) are generally flat and coplanar with sharp corners (See figure 1A). It further teaches that the track pitch is set to 1.6 micrometer (See col.2 lines 66-67). It further teaches that the width of the groove bottom (9) is 1 micrometer which is converted to the 1000 nm, which inherently suggests that the width of the groove bottom is greater 100 nm as well as greater than 250 nm. It discloses width of the groove is 1000 nanometer which is greater than 25% of the track pitch as well as greater than the 35% of the track pitch.

40. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Sandstrom ('663) by providing width of the groove bottoms is greater than 25% of track pitch because such an alignment is involved to represent the quantity of reflected beam from the groove surface as well as from the mirror surface disc for improving the measure of evaluation of noise in the optical disc during molding process as suggested by Sasaki et al. ('353).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIMPLE N. BODAWALA whose telephone number is (571)272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PHILLIP C. TUCKER can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Dimple N Bodawala
Examiner
Art Unit 1791

/D. N. B./
Examiner, Art Unit 1791

/Philip C Tucker/
Supervisory Patent Examiner, Art Unit 1791